



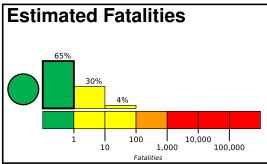


PAGER Version 12

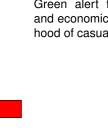
Created: 6 hours, 16 minutes after earthquake

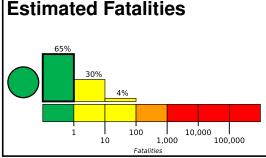
M 3.8, 8 km SW of Niland, CA

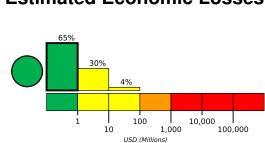
Origin Time: 2023-08-02 05:38:08 UTC (Tue 22:38:08 local) Location: 33.1719° N 115.5923° W Depth: 5.0 km



Green alert for shaking-related fatalities Estimated Economic Losses and economic losses. There is a low likelihood of casualties and damage.







Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		11,325k	1,097k	33k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVE	SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
DAMAGE	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

^{*}Estimated exposure only includes population within the map area.

Population Exposure

32.1°N

population per 1 sq. km from Landscan

5000 116.6°W 115.2°W 113.9°W Needles Desert Hills /ictorville arker an Bernardino

Calipatria ے Srawle /

I Centro

Guadalupe Victoria

Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

Historical Earthquakes

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1991-06-28	253	5.6	VI(1,267k)	1
1992-06-28	142	7.3	VIII(23k)	1
1971-02-09	292	6.6	IX(21k)	65

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org				
MMI	City	Population		
IV	Calipatria	8k		
IV	Niland	1k		
IV	Westmorland	2k		
IV	Brawley	25k		
Ш	Imperial	15k		
Ш	El Centro	43k		
II	Mexicali	597k		
I	Tijuana	1,376k		
I	San Diego	1,307k		
1	Riverside	304k		
1	Ensenada	257k		

bold cities appear on map.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

Ensenada